SUPPLEMENTAL

COUNCL AGENDA: 10-26-10 ITEM: 4.3 (a.)



Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Joseph Horwedel

SUBJECT: See below

DATE: October 14, 2010

Approved Paul Knull Date 10/20/10

COUNCIL DISTRICT: City-Wide SNI AREA: All

SUPPLEMENTAL

SUBJECT: ADOPTION OF THE 2010 CALIFORNIA BUILDING STANDARDS

REASON FOR THE SUPPLEMENTAL

This supplement provides:

- 1. Additional information on local amendments regarding certain structural design requirements, fire sprinkler regulations, and other building requirements, and provides more specific information on the amendments to the Ordinance.
- 2. Correction to the Technical Amendments portion of the Summary of New Amendments.
- 3. Modification to the Recommendation language as follows:
 - 1.a) Change the acronym for California Green Building Standards Code from (CGBSC) to (CALGreen)
 - 1.b) Adopt local amendments regarding certain structural design requirements, fire sprinkler regulations, and other building requirements.

ANALYSIS

This Supplemental Memo addresses item 1) of the Recommendation of the September 27, 2010, Community and Economic Development Committee memo. A Supplemental Memo from the

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Fire Chief addresses the recommendation to amend Chapter 17.12 of the San Jose Municipal Code as outlined in item 2).

Staff proposes to adopt local amendments regarding certain structural design requirements, fire sprinkler regulations, and other building requirements due to the following express findings:

- 1. The San Francisco Bay area region is densely populated and located in an area of high seismic activity. San Jose is bounded by the Hayward and San Andreas faults capable of producing major earthquakes.
- 2. Concern for fire-life safety associated with a structural failure due to a seismic event considering the increasing number of buildings in the region, the use of new structural systems, the poor performance of certain materials, and the quality of construction.
- 3. Severe seismic events could disrupt communications, damage gas mains, cause extensive electrical hazards, and place extreme demands on the limited and widely dispersed resources of the Fire Department to meet the fire and life safety needs of the community.
- 4. The local geographic, topographic, and climatic conditions pose an increase hazard in acceleration, spread, magnitude and severity of potential fires in the City of San Jose, and may cause a delayed response from emergency responders, allowing further growth of the fire.

The Building related codes that will be adopted in the proposed ordinance are:

- 2010 California Building Code CCR Title 24 Part 2
- 2010 California Residential Code CCR Title 24 Part 2.5
- 2010 California Electrical Code CCR Title 24 Part 3
- 2010 California Mechanical Code CCR Title 24 Part 4
- 2010 California Plumbing Code CCR Title 24 Part 5
- 2010 California Historical Building Code CCR Title 24 Part 8
- 2010 California Existing Building Code CCR Title 24 Part 10
- 2010 California Green Building Standards Code CCR Title 24 Part 11
- 2009 International Existing Building Code, Appendix Chapters A2, A3 and A4

Summary of the Ordinance

The proposed ordinance accomplishes the following:

- 1. Adopt the 2010 edition of the California Building, Residential, Electrical, Mechanical, Plumbing, Historical Building, Existing Building and Green Building Standards Codes and the 2009 edition of the International Existing Building Code, Appendix Chapters A2, A3 and A4 by a single ordinance.
- 2. Adopt local amendments to the California Codes.
- 3. Update the administration section to include the California Residential and the California Green Building Standards Codes.
- 4. Update or eliminate cross-references to match current code language.

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Summary of the Revised Sections of Title 24 Chapters of the San Jose Municipal Code

- Chapter 24.01 governs the Administrative provisions including definitions, procedures, interpretation, and authority.
- Chapter 24.02 governs the issuance of Permits, including requirements, exemptions, applications, issuance, renewals and extensions, fees, inspections, certificates of occupancy, and appeals.
- Chapter 24.03 adopts the California Building Code with the local amendments
- Chapter 24.04 adopts the California Plumbing Code with no local amendments.
- Chapter 24.05 adopts the California Mechanical Code with no local amendments.
- Chapter 24.06 adopts the California Electrical Code with no local amendments.
- Chapter 24.07 adopts the California Existing Building Code with no local amendments.
- Chapter 24.08 adopts Appendix Chapter A2, A3 and A4 of the 2009 International Existing Building Code to supplement the California Existing Building Code.
- Chapter 24.09 adopts the California Residential Code with the local amendments
- Chapter 24.10 adopts the California Green Building Standards Code residential and non-residential mandatory measures.
- Chapter 24.11 adopts the California Historical Building Code with no local amendments.

Corrections to the Technical Amendments portion of the Summary of New Amendments

The Technical Amendments outlined in the September 27, 2010, memorandum on this subject to the Community and Economic Development Committee identified amendments that had previously been adopted and are preserved. The <u>new</u> Technical Amendments contained within the revised Ordinance include:

- 1. Concrete Construction (CBC Chapter 17 and CRC Chapter 4)
 - a. Modification to the CBC Section 1704.4 will require special inspections when the structural design of foundations, under specific conditions, is based on a specified compressive strength greater than 2,500 pounds per square inch.
 - b. Modification to CRC Section R403.1.3 will require steel reinforcement in concrete footings of detached one- and two- family dwellings and townhouses.
- 2. Conventional Light Frame Construction (CBC Chapter 23 and CRC Chapter 3)
 - a. CBC Section 2301.2 and 2308.1 Modify the CBC Section 2301.2 and 2308.1 to disallow the use of gypsum wallboard or diagonal let-in bracing in braced wall panels of conventional light-frame construction, and to limit the use of Portland cement (stucco), diagonal wall sheathing, particle board sheathing, structural fiberboard sheathing and hardboard panel siding in braced walls.
 - b. CBC Section 2308.12.4 Modify CBC Section 2308.12.4 to specify the maximum spacing of wall study and the minimum nailing requirements for braced wall line sheathing.

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c. CRC Sections R301.1.1 and R301.2.1.1 Modify CRC Sections R301.1.1 and R301.2.1.1 to disallow use of the American Forest and Paper Association's Wood Framed Construction Manual as a reference for conventional light-frame wood construction and for the design of buildings in high wind regions.

3. Wall Bracing (CRC Chapter 6)

Modify CRC Table 602.10.1.2 (2) to disallow the use of gypsum wallboard and diagonal let-in bracing in braced wall panels, and to limit certain types of braced walls to single story use only.

The amendments in the Summary of Amendments section of the CED memo for Fire Sprinkler Regulations, CBC Appendices, CRC Appendices, and Administrative Provisions were correctly reported.

EVALUATION AND FOLLOW-UP

The approval of this ordinance will not impact current performance measures. However, due to changes in the codes and the introduction of the new California Residential and Green Building Standards Codes, staff and the design professionals will need time to adjust and be familiar in the application of these new codes. Current performance levels are expected to slightly decline in the first six months.

PUBLIC OUTREACH/INTEREST

In addition to the outreach outlined in the September 27, 2010, CED memorandum, the proposed local amendments were sent via email to stakeholders and shared with attendees at Developer Roundtable meetings. The free training session discussed in the original memo now has the scheduled date of November 6, 2010.

/s/ Joseph Horwedel, Director Planning, Building and Code Enforcement

For questions please contact Edward Tolentino, Building Official, at (408) 535-7791.